

20070225.ba v04_n018.bam.20070225

>From ???@??? Sun Feb 25 13:17:34 2007 -0600
Date: Sun, 25 Feb 2007 19:16:00 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 4018
Message-Id: <20070225191601.030993183BB@srvr1.theporch.com>

BOATANCHORS Digest 4018

Topics covered in this issue include:

- 1) New Talisman for Audiophools!
by "David Stinson" <arc5@ix.netcom.com>
- 2) Re: New Talisman for Audiophools!
by wb3fau@att.net
- 3) Re: cw demise
by "RJ Mattson" <rjmattson@hvi.net>
- 4) Re: CW DEmise?
by "Sandy W5TVW" <ebjr@i-55.com>
- 5) Book on restoring communication receivers.
by "John Gibson" <gibsonj@mindspring.com>
- 6) Re: CW DEmise?
by "Arden Allen" <gumbear@pacbell.net>
- 7) Re: CW DEmise?
by David Stinson <arc5@ix.netcom.com>
- 8) Re: CW DEmise?
by Dan Arney <hankarn@pacbell.net>
- 9) CW demise
by David M Sundheimer <w0nbz@juno.com>
- 10) Re: CW demise
by Steve Berg <wa9jml@tbc.net>
- 11) Free Book
by "John Gibson" <gibsonj@mindspring.com>
- 12) Re: CW demise
by w8au@sssnet.com
- 13) Change of Email Address
by "Mike" <mike46@cwjamaica.com>
- 14) Re: CW demise
by "Tom Rauch" <w8ji@contesting.com>
- 15) Shrader texts?
by Zengmeiste@aol.com
- 16) Solid State Rectifier Replacement for 51JX
by "Thomas Frobase" <tfrobase@kitparts.com>
- 17) Re: Solid State Rectifier Replacement for 51JX
by "Brian A Clarke" <brianclarke01@optusnet.com.au>
- 18) Re: Solid State Rectifier Replacement for 51JX

- by "Tom Rauch" <w8ji@contesting.com>
- 19) RE: Solid State Rectifier Replacement for 51JX
by "Thomas Frobase" <tfrobase@kitparts.com>
 - 20) Re: Solid State Rectifier Replacement for 51JX
by Bob Roehrig <broehrig@aurora.edu>
 - 21) Re: Solid State Rectifier Replacement for 51JX
by Ben Hall <kd5byb@bellsouth.net>
 - 22) Re: Solid State Rectifier Replacement for 51JX
by "Tom Rauch" <w8ji@contesting.com>
 - 23) CW Demise?
by W7fni@aol.com
 - 24) Re: Solid State Rectifier Replacement for 51JX
by "Arden Allen" <gumbear@pacbell.net>

Message-ID: <001701c7575e\$3c3e32c0\$fa01fea9@Default>
From: "David Stinson" <arc5@ix.netcom.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: New Talisman for Audiophools!
Date: Fri, 23 Feb 2007 09:21:03 -0600
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I just found a WWII Era coax jumper
(cloth insulation) with two PL-259s,
engraved with "Western Electric," "PL-259"
and "CW-49190." They're also stamped,
with black ink, "CA 27." It also has a metal band
around one end; it has markings, but I can't read them
because they're covered with thick, brown paint.

A W.E. engraving... hot dog!
Ought to bring enough to buy an L-7, don'tcha think?
(Actually, I'm gonna send them to a certain
electronic warfare fan, since they probably
belong in with his gear :).

From: wb3fau@att.net
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: New Talisman for Audiophools!
Date: Fri, 23 Feb 2007 15:46:13 +0000
Message-Id:
<022320071546.25479.45DF0C45000795280000638721602807489A0E00CC0D99@att.net>

aka- "monster cable"

Message-ID: <004001c75762\$f185fc90\$e10260cf@Laptop>
From: "RJ Mattson" <rjmattson@hvi.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: cw demise
Date: Fri, 23 Feb 2007 10:54:45 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Good post - I sadly agree.
But we don't have packed wall to wall QRM like in the 60's license peak -
enjoy what we have - life is short :-)
bob...w2ami x wn2ami 1962

----- Original Message -----
From: <wb3fau@att.net>
Subject: cw demise

My opinion is- the code no longer matters. There just is not any
interest in radio- period. Its for us old guys, yes,
thats us. Remember the magazines you read when you were a kid? The
new kids are not reading that stuff- they are reading about computer
upgrades. I am 51, and i see it everyday. New guy at work, just out of
college, he has an electronics degree, and all he
knows about is computers. i think Ham Radio will wither as TOM said it
would not. Russ.

Message-ID: <00f101c7576d\$dd0f07b0\$86a0cdd1@gateway>
From: "Sandy W5TVW" <ebjr@i-55.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: CW DEmise?
Date: Fri, 23 Feb 2007 11:10:28 -0600
MIME-Version: 1.0
Content-Type: text/plain;
 format=flowed;
 charset="iso-8859-1";
 reply-type=original
Content-Transfer-Encoding: 7bit

Yes CW DOES live. Why can't the "fecal brains" at the FCC realize this?
Same mindset as the FEMA crowd after Katrina's wrath! They STILL haven't

really gotten the message as to what happened here! Same old bureauracracy and stupidity. Too many people trying to be important who don't know what they are doing!

73,

Sandy W5TVW

----- Original Message -----

From: "David Thompson" <thompson@mindspring.com>

To: "Old Tube Radios" <boatanchors@theporch.com>

Sent: Thursday, February 22, 2007 7:52 PM

Subject: CW DEmise?

> It's true CW is being dropped as a requirement for ANY amateur radio
> license. The ARRL asked for the 5WPM be a part of at least the Extra so
> please don't blame ARRL for getting rid of the CW requirement.
>
> If anyone had been on 160 two weekends ago or vuirtually any band last
> weekend there would be no doubt that CW lives. Look at the DxSummit spot
> web site and CW is usually 75% of the Dx spots. Even the recent Classic
> CW
> weekend was a success.
>
> Now the idea is to get the 300,000 Techs and new Generals to try CW.
>
> CW lives!
>
> 73 Dave K4JRB
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.441 / Virus Database: 268.18.3/699 - Release Date: 2/23/2007
> 1:26 PM
>
>

Date: Thu, 22 Feb 2007 09:56:55 -0800

Subject: Book on restoring communication receivers.

From: "John Gibson" <gibsonj@mindspring.com>

To: Old Tube Radios <boatanchors@theporch.com>

Mime-version: 1.0

Content-type: text/plain; charset="US-ASCII"

Content-transfer-encoding: 7bit

Message-Id: <E1HKefc-0002vy-00@pop06.mail.atl.earthlink.net>

I just read a really instructive book (a 96page pdf download) "The Restoration of Valved High Frequency Communications Receivers". It covers in detail, clearing all kinds of baffling faults that might be met with.

The final chapter covers faults likely to be found in common receivers such as AR88, R390, R390A, Racal, Collins etc.

The book can be found at the www.vk2bv.org/radio/ site.

John.

Message-ID: <001a01c75781\$bdad2ff0\$f6e47443@KB6NAX>

From: "Arden Allen" <gumbear@pacbell.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: CW DEmise?

Date: Fri, 23 Feb 2007 11:35:09 -0800

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

> Yes CW DOES live. Why can't the "fecal brains" at the FCC realize this?
> Same mindset as the FEMA crowd after Katrina's wrath! They STILL haven't
> really gotten the message as to what happened here! Same old
bureauracracy
> and stupidity. Too many people trying to be important who don't know what
> they are doing!

To commint the unforgivable sin, I'll mention the politics: It is the INTENTION of the present regime in Washington to DESTROY >>>ALL<<< GOVERNMENT PROGRAMS AND SERVICES. The bureaucrats are not so much "fecal brains" as they are s... heads, the tools of an ideology that says there is no need of the people for government services. Thankyou Ronnie (god father of s... heads)!

Arden Allen

KB6NAX

Message-ID: <30098030.1172260198242.JavaMail.root@elwamui-cypress.atl.sa.earthlink.net>

Date: Fri, 23 Feb 2007 13:49:58 -0600 (GMT-06:00)

From: David Stinson <arc5@ix.netcom.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: CW DEmise?

Mime-Version: 1.0

Content-Type: text/plain; charset=UTF-8

Content-Transfer-Encoding: 7bit

-----Original Message-----

>From: Arden Allen <gumbear@pacbell.net>

>To commint the unforgivable sin, I'll mention the politics:

> Thankyou Ronnie (god father of s... heads)!

If you guys bring the pitchforks and torches
to the old oak tree, I'll bring a good, stout rope (heh heh! ;-).

Message-ID: <45DF6159.4030006@pacbell.net>

Date: Fri, 23 Feb 2007 15:49:13 -0600

From: Dan Arney <hankarn@pacbell.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

CC: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: CW DEmise?

Content-Type: text/plain; charset=ISO-8859-1; format=flowed

Content-Transfer-Encoding: 7bit

Sandy, That is referred to a "THE PETER PRINCIPAL" By Dr. Peters
in short they are at the level of incompetence.

Hank

KN6DI/5

To: Old Tube Radios <boatanchors@theporch.com>

Date: Fri, 23 Feb 2007 15:08:45 -0600

Subject: CW demise

Message-ID: <20070223.160245.2632.5.w0nbz@juno.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=iso-8859-1

Content-Transfer-Encoding: 8bit

From: David M Sundheimer <w0nbz@juno.com>

Ham radio is a dying hobby. Pick up a copy of QST and count all the
people in the pictures. Then count all the people under 30.

Dave WYNBZ since 1957

Message-ID: <45DF69B3.1000603@tbc.net>

Date: Fri, 23 Feb 2007 16:24:51 -0600

From: Steve Berg <wa9jml@tbc.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: CW demise

Content-Type: text/plain; charset=ISO-8859-1; format=flowed

Content-Transfer-Encoding: 8bit

Ham radio is hardly dying. Here is why. While many of us got our starts in high school, this was because the distractions of sex and drugs were not nearly as available as they are now. Consequently, I am not concerned about the graying of the hobby because there are new people turning fifty every day. These are the folks who are what are going to keep the hobby alive. It also means that we are going to have to work harder to find suitably interested people and elmer them. Something analogous to ham radio's situation are the booming sales of Harley Davidson motorcycles. Most of the buyers are guys who wanted a Harley when they were younger but could not afford one or else their spouse was dead set against a bike. Now, these fellows (and some fine gals), are middle aged and have money and are free of family obligations enough to enjoy what they wanted back in their youth. How many people are finally buying the older tube gear they wanted in high school, now that it is available on the e-place? I know I am. Us middle aged folks can generally look forward to several more decades of hamdom, and I trust that I will be enjoying my new and old rigs, and CW for quite a few years yet. Then, there is the 1971 Harley I have restored over the past several years which is just waiting for the snow to melt before getting pushed out onto the driveway and fired up...

73,

Steve WA9JML

David M Sundheimer wrote:

> Ham radio is a dying hobby. Pick up a copy of QST and count all the
> people in the pictures. Then count all the people under 30.

> Dave WYNBZ since 1957

>

>

>

>

Date: Thu, 22 Feb 2007 14:52:20 -0800

Subject: Free Book

From: "John Gibson" <gibsonj@mindspring.com>

To: Old Tube Radios <boatanchors@theporch.com>

Mime-version: 1.0

Content-type: text/plain; charset="US-ASCII"

Content-transfer-encoding: 7bit

Message-Id: <E1HKjHW-0005GZ-00@pop04.mail.atl.earthlink.net>

I should have mentioned that the book "The Restoration of Valved Communications Receivers" is a free pdf download on the site WWW.vk2bv.org/radio/ The rest of the site is interesting.
John.

Date: Fri, 23 Feb 2007 21:28:24 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: w8au@sssnnet.com
Subject: Re: CW demise
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed
Message-Id: <20070224022830.03D63187AF3@srvr1.theporch.com>

At 04:08 PM 2/23/2007, David M Sundheimer wrote:

> Ham radio is a dying hobby. Pick up a copy of QST and count all the
> people in the pictures. Then count all the people under 30.
>

Very similar to my teenage years in the fifties; all the hams were much older.
Now most of them are younger. So what's new? :-)

Perry w8au

From: "Mike" <mike46@cwjamaica.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Change of Email Address
Date: Sat, 24 Feb 2007 08:39:48 -0500
Message-ID: <0000001c75819\$40efea00\$01000000a@usern1yudx31pt>
MIME-Version: 1.0
Content-Type: text/plain;
charset="windows-1250"
Content-Transfer-Encoding: 7bit

Please be advised my email address is changing:

Old: mike46@cwjamaica.com

New: mike46@shaw.ca

Effective upon receipt.

Thanks,

Mike VE7MMH

--

No virus found in this outgoing message.

Checked by AVG Free Edition.

Version: 7.5.441 / Virus Database: 268.18.3/699 - Release Date:
2/23/2007 1:26 PM

Message-ID: <04f701c75847\$76e15670\$640fa8c0@radiatoroom>

From: "Tom Rauch" <w8ji@contesting.com>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: CW demise

Date: Sat, 24 Feb 2007 14:10:23 -0500

MIME-Version: 1.0

Content-Type: text/plain;

format=flowed;

charset="iso-8859-1";

reply-type=response

Content-Transfer-Encoding: 7bit

> The yellow GROL certificate they gave as replacement for

> 1st and 2nd Radiotelephone was

> a "lifetime" ticket. (for what that's worth)

I dug my FCC yellow downgrade paper out and it has an
expiration date of February 4, 1988 on the front. License
number PG-19-2626.

This is a yeller General Radiotelephone Operator License
they sent to make me feel bad after cancelling my First
Class with a big stamp.

So is that license actually still good after all these
years?

From: Zengmeiste@aol.com

Message-ID: <c38.fd9a39c.33121089@aol.com>

Date: Sat, 24 Feb 2007 17:04:57 EST

Subject: Shrader texts?

To: Old Tube Radios <boatanchors@theporch.com>

MIME-Version: 1.0

Content-Type: multipart/alternative;

boundary="part1_c38.fd9a39c.33121089_boundary"

--part1_c38.fd9a39c.33121089_boundary
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Sorry, lost the thread; which book was it? 'Electronic Communications',
'Amateur Radio Theory and Practice' or 'Practice Tests for Radiotelephone
Licenses'? That's Robert L Shrader, yes?

Thanks & 73, Terry KC9KEL

AOL now
offers free email to everyone. Find out more about what's free from AOL at

--part1_c38.fd9a39c.33121089_boundary
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * *
* ---REMAINDER OF MESSAGE TRUNCATED--- *
* This post contains a forbidden message format *
* (such as an attached file, a v-card, HTML formatting) *
* Mail Lists at theporch.com only accept PLAIN TEXT *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *

--part1_c38.fd9a39c.33121089_boundary--

From: "Thomas Frobase" <tfrobase@kitparts.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Solid State Rectifier Replacement for 51JX
Date: Sat, 24 Feb 2007 20:01:16 -0600
Message-ID: <05ee01c75880\$d7326210\$0c01010a@tfrobase1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

I know this is off topic for this group since it doesn't cover the demise of
amateur radio and it is solid state!

I have been experimenting with a no mod plug-in replacement for the tube
rectifier for my R-388. I have only got knocked on my butt once during
testing!

A couple of diodes are connected in place of the plate to cathode connections in the original tube. A 15K ohm resistor is placed in series with the cathode connection allowing the filter capacitors to charge slowly. The 5 AC filament voltage is used to create a regulated 5 VDC supply floating on top of the B+. In turn the 5 volt supply provides power to a small micro that resets on power up. The program in the micro closes small relay across the 15K resistor closes at the end of a ~15 second time delay.

Anybody else interested in doing this? If so I will write it up and make a small circuit board that will fit in an octal socket. My other thought would be to monitor maximum current and create an electronic fuse with the by bypass relay.

Tom, N3LLL

Message-ID: <03a401c758a5\$f21bba20\$0202a8c0@Belkin>
From: "Brian A Clarke" <brianclarke01@optusnet.com.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Solid State Rectifier Replacement for 51JX
Date: Sun, 25 Feb 2007 17:26:53 +1100
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

What an incredibly wasteful way of achieving your outcome!

The easiest way to achieve slow turn on, that is fail-safe, is to put a mains voltage relay across the mains transformer's primary; then put a resistor in series with the incoming mains - possibly in the 10 to 30 Ohm region - you'll have to suck it and see to get your preferred outcome. Finally, connect the Normally Open contacts of the relay across this resistor. As you experiment, start with higher power resistors till you are sure of not burning one out during the slowed start-up - perhaps 5 W to 10 W? The whole kit and caboodle should fit in a space 2" x 2" x 1.5" maximum - the relay is the biggest item.

Theory of operation

At turn on, the resistor is in series with the charging circuit, the filter capacitors on the secondary side gradually charge up and as they do, the voltage across the primary of the transformer rises. At that point when the mains transformer's primary voltage reaches the cut-in voltage of the relay coil, the NO contacts close and short the resistor.

This start-up circuit has been in the ARRL Handbook for aeons.

Now, to protect your transformer, put a couple of 10 Ohm 2 W resistors

between the transformer secondary and the silicon diodes.

73 de Brian, Vk2GCE.

Message-ID: <055c01c758b8\$ddce73b0\$640fa8c0@radiatoroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Solid State Rectifier Replacement for 51JX
Date: Sun, 25 Feb 2007 03:42:12 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 format=flowed;
 charset="iso-8859-1";
 reply-type=original
Content-Transfer-Encoding: 7bit

>I know this is off topic for this group since it doesn't
>cover the demise of
> amateur radio and it is solid state!

The Good Book warns the end is near when the mico lays down
with the vacuum rectifier....

> A couple of diodes are connected in place of the plate to
> cathode
> connections in the original tube. A 15K ohm resistor is
> placed in series
> with the cathode connection allowing the filter capacitors
> to charge slowly.
> The 5 AC filament voltage is used to create a regulated 5
> VDC supply
> floating on top of the B+. In turn the 5 volt supply
> provides power to a
> small micro that resets on power up. The program in the
> micro closes small
> relay across the 15K resistor closes at the end of a ~15
> second time delay.

I don't understand, other than the fun of making something
work, what is gained from all that work. What frequencies
can you hear the micro on, or does it shut down the clock
after connecting the HV?

73 Tom

From: "Thomas Frobase" <tfrobase@kitparts.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Solid State Rectifier Replacement for 51JX
Date: Sun, 25 Feb 2007 07:20:48 -0600
Message-ID: <070501c758df\$c5199d50\$0c01010a@tfrobase1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

I guess I did not explain my goal was to delay jamming the set with B+ while the tubes were warming up.

The other goal was to fit it in the octal socket without modification to the radio.

"What an incredibly wasteful way of achieving your outcome!"

I hardly call an 8 pin processor that costs \$1.50 wasteful. It can do what a 555 timer does without external components. It would do its timing thing and then go to sleep until the radio is power cycled.

Theory of operation

At turn on, the resistor is in series with the charging circuit, the filter capacitors on the secondary side gradually charge up and as they do, the voltage across the primary of the transformer rises. At that point when the mains transformer's primary voltage reaches the cut-in voltage of the relay coil, the NO contacts close and short the resistor.

This start-up circuit has been in the ARRL Handbook for aeons.

Now, to protect your transformer, put a couple of 10 Ohm 2 W resistors between the transformer secondary and the silicon diodes.

73 de Brian, Vk2GCE.

Date: Sun, 25 Feb 2007 11:49:14 -0600 (CST)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Solid State Rectifier Replacement for 51JX
Message-ID: <Pine.LNX.4.61.0702251146570.17653@hermes.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII; format=flowed

On Sun, 25 Feb 2007, Brian A Clarke wrote:

> The easiest way to achieve slow turn on, that is fail-safe, is to put a
> mains voltage relay across the mains transformer's primary; then put a
> resistor in series with the incoming mains - possibly in the 10 to 30 Ohm
> region

You can also achieve turn-on surge protection by using the inrush limiters that Digikey sells. Merely install in the hot AC input lead and forget. A lot of equipment isn't even fused so when I open 'er up to install a fuse holder, the limiter goes right in line with it.

Bob Roehrig
Aurora University Telecom dept.
broehrig@aurora.edu
K9EUI W9ZGP WD2XSH/19
630-844-4898 fax 630-844-4222
"Nostalgia is a thing of the past"

Message-ID: <45E1CD0F.9020708@bellsouth.net>
Date: Sun, 25 Feb 2007 11:53:19 -0600
From: Ben Hall <kd5byb@bellsouth.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Solid State Rectifier Replacement for 51JX
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Why not use an in-rush current limiter?

It looks like a big disc cap, installs in the AC line, and if properly sized, allows for a very gentle turn on. B+ rises nicely, as the AC voltage is applied slowly to the transformer primary. Same happens to the tube filaments. There is no B+ slamming, which I think is bad as well.

Keystone makes them, I've got them in all my tube gear. Believe mine are CL-90's, but I may be wrong as my memory is pretty bad. You size them according to the steady-state load of the equipment.

It's one component and completely passive.

thanks and 73,
ben, KD5BYB

Thomas Frobase wrote:

> I guess I did not explain my goal was to delay jamming the set with B+ while
> the tubes were warming up.
>
> The other goal was to fit it in the octal socket without modification to the
> radio.
>
> "What an incredibly wasteful way of achieving your outcome!"
>
> I hardly call an 8 pin processor that costs \$1.50 wasteful. It can do what
> a 555 timer does without external components. It would do its timing thing
> and then go to sleep until the radio is power cycled.
>
> Theory of operation
> At turn on, the resistor is in series with the charging circuit, the filter
> capacitors on the secondary side gradually charge up and as they do, the
> voltage across the primary of the transformer rises. At that point when the
> mains transformer's primary voltage reaches the cut-in voltage of the relay
> coil, the NO contacts close and short the resistor.
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> This start-up circuit has been in the ARRL Handbook for aeons.
>
> Now, to protect your transformer, put a couple of 10 Ohm 2 W resistors
> between the transformer secondary and the silicon diodes.
>
> 73 de Brian, Vk2GCE.
>
>
>

Message-ID: <059701c7590c\$90131dc0\$640fa8c0@radioroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Solid State Rectifier Replacement for 51JX
Date: Sun, 25 Feb 2007 13:41:18 -0500
MIME-Version: 1.0
Content-Type: text/plain;
 format=flowed;
 charset="iso-8859-1";
 reply-type=original
Content-Transfer-Encoding: 7bit

>I guess I did not explain my goal was to delay jamming the
>set with B+ while
> the tubes were warming up.

I think "jamming with B+" paints a colorful but greatly exaggerated picture of what really happens.

If you spend another 40 years with your boatanchor and a note pad, you probably won't find any correlation between delaying the HV until the tubes are warm and any failures. The only possible problem would be a bit extra voltage while the increasing load from the tubes pulls down voltage, but any good design would have already accounted for that in capacitor voltage ratings. Any change would certainly be lost in the clutter of other failure mechanisms.

Now a real worry might be the increased HV caused by using solid state rectifiers and today's 120-125 supply mains being higher than the old 110-115 volt stuff, but that problem certainly isn't addressed at all by ramping up the HV.

Certainly a resistor in series with the rectifiers to compensate for the loss of voltage drop through the high vacuum rectifier would be more worthwhile than fixing something that isn't actually a problem.

>From my viewpoint it's like worrying about the microvolts of dielectric piezo effect in a 250 volt bypass or coupling circuit.

73 Tom

From: W7fni@aol.com
Message-ID: <bd0.e5b80b2.331336f3@aol.com>
Date: Sun, 25 Feb 2007 14:01:07 EST
Subject: CW Demise?
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----1172430067"

-----1172430067
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Greetings to all: CW demise ? Dont mention that word demise out loud to me!!! I took my first cw exam in 1934 and have greatly enjoyed cw since. I am 91

yrs old and still having fun on CW. Dont fret the idiots who have been braying for years about their imagined shortcomings of CW!!!Let the go and good riddance.

RAY JEFFERSON,
w7FNI SINCE 1934 AND STILL GOING

-----1172430067
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * *
* ---REMAINDER OF MESSAGE TRUNCATED--- *
* This post contains a forbidden message format *
* (such as an attached file, a v-card, HTML formatting) *
* Mail Lists at theporch.com only accept PLAIN TEXT *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting *
* * * * *

-----1172430067--

Message-ID: <001d01c75911\$36af9060\$65e47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Solid State Rectifier Replacement for 51JX
Date: Sun, 25 Feb 2007 11:14:27 -0800
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Groooaaannnnnnn! This so-called improvement to a reciever is pure unadultered nonsense no doubt inspired by the audiophoolish mentality of doing everything by old wife's tales instead of backed by sound reasoning and knowledge of electronic theory. First of all, the 51Jx receivers have TWO (2) built in surge limiters. One is the rectifier tube that 1) warms up slowly, and even if power is cycled when the tube is hot there is the PLATE RESISTANCE to limit current to the filter capacitor. Secondly, the resistance of the high voltage winding is substantial and in series with the rectifier's plate resistance comprises the REAL SURGE LIMITING RESISTANCE. Note the use of the word "real."

So I ask, what is the purpose of replacing a rectifier tube with silicon diodes? Furthermore, WHAT IS THE MAXIMUM PEAK CURRENT THE FILTER CAPACITOR WILL EVER EXPERIENCE? And, HOW DO YOU DETERMINE THE NON-REPETITIVE PEAK CURRENT CAPABILITY OF THE FILTER CAPACITOR? An inquiring mind would learn to

figure it out.

Those who refuse to learn the simple fundamental law of electricity, OHM'S LAW, and then apply it to even the simplest of circuits, are doomed to going nowhere with a soldering iron in hand.

I could tell many stories about the idiocy that pervades the audio world but that would be belaboring the subject. What gets my ire up is the attempted inroads into amateur radio the cultism of audiophoolery brings.

Instead of inventing mythical problems to solve there's plenty of real work to do to keep our boatanchors alive and healthy. And there are limitless possibilities to build from parts all kinds of radio gear from the ground up instead preying on vintage gear that will eventually be (hopefully) enjoyed by a future owner.

Get a 5R4....

Arden Allen
KB6NAX

End of BOATANCHORS Digest 4018
